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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,399	07/24/2001	Laura J. Bail	CGW-247	2384
7590	10/14/2003		EXAMINER	
Maurice M Klee 1951 Burr Street Fairfield, CT 06430				HALPERN, MARK
		ART UNIT	PAPER NUMBER	1731

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/787,399	BALL ET AL.
	Examiner Mark Halpern	Art Unit 1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-17 and 22 is/are allowed.
- 6) Claim(s) 18 and 19 is/are rejected.
- 7) Claim(s) 20 and 21 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

- 1) Claims 22 is objected to because of the following informalities: claim 22 should begin with --An-. Appropriate correction is required.

### ***Information Disclosure Statement***

- 2) The references cited in the Search Report dated 12/23/1999, have been considered, but will not be listed on any patent resulting from this application because they were not provided on a separate list in compliance with 37 CFR 1.98(a)(1). In order to have the references printed on such resulting patent, a separate listing, preferably on a PTO-1449 form, must be filed within the set period for reply to this Office action.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 3) Claims 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Kawazoe (4,826,520). Kawazoe discloses burner 25 of multiwall tube (nine-wall tube) structure. The burner includes central passage 21 constructed of tube 11a, and surrounding

passages 22 to 24 constructed of tubes 12 to 19 (col. 3, lines 47-65, and Figure 1). As shown in Figure 1, the burner includes a burner face. As seen from the Figure, the burner is constructed in such a manner that the first tube representing the first region is surrounded by the second tube representing the second region, the second tube representing the second region is surrounded by the third tube representing the third region, the third tube representing the third region is surrounded by the fourth tube representing the fourth region, until the eight tube representing the eighth region is surrounded by the ninth tube representing the ninth region. The present claims are apparatus claims. Apparatus claims must be structurally distinguishable from the prior art. Manner of operating the device does not differentiate apparatus claims from the prior art. MPEP 2114. In the present invention, the materials and gases emitted from the particular regions are not of consideration and no patentable weight is imparted to the claim since they are method and not apparatus structural limitations.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 4) Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawazoe. Kawazoe is applied as above for claim 18, Kawazoe is silent in regard the

third, fourth, fifth and sixth regions being radially spaced from one another by substantially the same distance. It would have been obvious, to one skilled in the art at the time the invention was made, that the third, fourth, fifth and sixth regions be radially spaced from one another by substantially the same distance, because such arrangement would provide flame symmetry and provide stable fabrication of product which is the object of Kawazoe (Abstract).

***Allowable Subject Matter***

- 5) Claims 1-17, 22, are allowed.
- 6) Claims 20-21, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for indication of allowable subject matter:

The primary reason for indicating allowable subject matter is that the cited prior art does not disclose: a method for forming a silica-containing boule including the steps of providing a burner having six gas emitting regions, wherein the sixth region is surrounding the fifth region, and wherein oxygen is provided to said sixth region (claim 1); a method for forming a silica-containing boule including the step of collecting the soot particles produced by the burner wherein the width of the stream of soot particles is controlled to enhance the efficiency of the step (claim 10); a soot-producing burner having six gas emitting regions including a baffle by the third region (claims 20-

21); apparatus for producing silica-containing soot comprising a burner that includes a baffle between a source-to-burner conduit and gas-carrying conduits (claim 22).

***Conclusion***

7) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone number is 703-305-4522. The examiner can normally be reached on Mon-Fri, (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Mark Halpern  
Patent Examiner  
Art Unit 1731